

# FILTER PRESS

## About

A filter press is an equipment used in liquid/solid separation. Specifically, the filter press separates the liquids and solids using pressure filtration, wherein a slurry is pumped into the filter press and is dewatered under pressure. Basically, each filter press is designed based on the volume and type of slurry that needs to be dewatered.

The four main components of a filter press include the frame, filter plates, manifold (piping and valves), and filter cloth, a key ingredient for optimizing filter press operations.

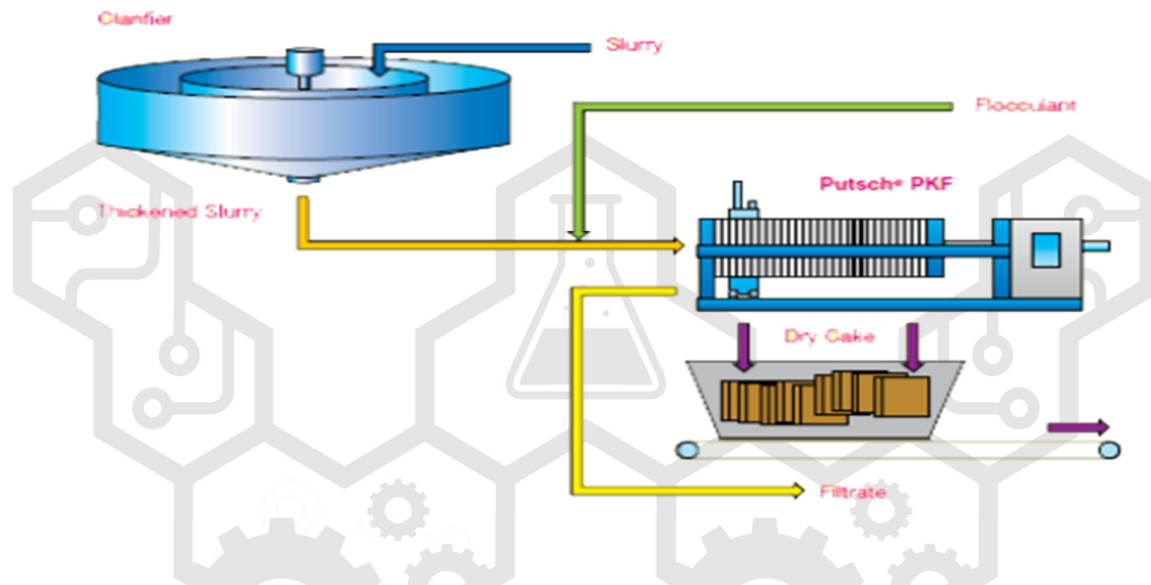
## FILTER PRESS



## Working Principle

The slurry is fed to the chambers and the filter cakes are accumulated in each chamber. As the filter cake becomes thicker, the filter resistance increases as well. So when the separating chamber is full, the filtration process is stopped as the optimum pressure difference is reached.

### Pre-Thickening prior to Filtration with Conditioning



The filtrate that passes through filter cloth is collected through collection pipes and stored in the filter tank. Filter cake (suspended solid) accumulation occurs at the chamber, then being separated at the filter plates by pulling the chamber filter press apart. The cakes then fall off from those plates and are discharged to the final collection point.

## Product Description

- :: Short working cycle and high efficiency.
- :: high pressure squeezing, which greatly reduces the water content in cake in a short time.
- :: Low operation cost.
- :: Low power consumption.
- :: Widely application.
- :: Available in both Manual & Hydraulic types.
- :: Corrosion resistance is strong.
- :: Basically applies to all solid-liquid separation projects.

## How does a Filter Press Work?

The working principle of filter presses is that slurry is pumped into the machine such that solids are distributed evenly during the fill cycle. Solids build up on the filter cloth, forming the filter cake; the filtrate exits the filter plates through the corner ports into the manifold, yielding clean filtered water.

Filter presses are a pressure filtration method and as such, as the filter press feed pump builds pressure, solids build within the chambers until they are completely chock-full of solids, forming the cake. Once the chambers are full, the cycle is complete and the filter cakes are ready to be released.



In many higher capacities filter presses, fast action automatic plate shifters are employed, speeding cycle time. Some filter presses are specifically designed for fully automatic, 24-hour operation in a harsh environment such as mines or chemical manufacturing plants.

## Application Range

- Biological Activated Sludge Dewatering
- Flocculated Sludge Dewatering

## Product Specifications

Product Name	Model No.	SPECIFICATION
<b>FILTER PRESS</b>	UTFP-12x12	12" x 12" + 11 No. Plates (Manual)
	UTFP-12x13	12" x 12" + 11 No. Plates (Hydraulic)
	UTFP-18x18	18" x 18" + 17 No. Plates (Manual)
	UTFP-18x19	18" x 18" + 17 No. Plates (Hydraulic)
	UTFP-18x24	18" x 24" + 23 No. Plates (Manual)
	UTFP-18x25	18" x 24" + 23 No. Plates (Hydraulic)
	UTFP-24x24	24" x 24" + 23 No. Plates (Manual)
	UTFP-24x25	24" x 24" + 23 No. Plates (Hydraulic)
	UTFP-30x30	30" x 30" + 29 No. Plates (Manual)
	UTFP-30x31	30" x 30" + 29 No. Plates (Hydraulic)
	UTFP-32x32	32" x 32" + 31 No. Plates (Hydraulic)
	UTFP-36x36	36" x 36" + 35 No. Plates (Hydraulic)
	UTFP-40x40	40" x 40" + 39 No. Plates (Hydraulic)
	UTFP-48x48	48" x 48" + 47 No. Plates (Hydraulic)

## Contact Us



W360 Sophisticated Solutions Pvt. Ltd.

A-3/7, Ground Floor, Mayapuri Industrial Area Ph-II, New Delhi -110064

O: 011-47024300 E: [enquiry@w360.in](mailto:enquiry@w360.in) W: [www.W360.in](http://www.W360.in)